

Application Serial No. 10/516,814
Reply to office action of March 26, 2008

PATENT
Docket: CU-3992

REMARKS/ARGUMENTS

Reconsideration is respectfully requested.

Claims 1-4 are pending before this amendment. No claim is amended by this paper as none are deemed necessary for the reasons below. No new matter has been added.

In the office action (page 2), claims 1-2 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,053,339 (Patel). In the office action (page 3), claims 3-4 stand rejected under 35 U.S.C. § 103(a) as being obvious over Patel in view of U.S. Patent No. 6,103,865 (Bae). The "et al." suffix is omitted in a reference name.

The applicant respectfully **disagrees**.

Regarding Semi-permeability

The cited Patel reference is directed to semi-permeable film for the purposes of gas permeation. However, the semi-permeable material of the present invention is directed to, while the food freshness indicator is contacted with foods, preventing the permeation of food coloring or other nutrient-type substances into the foods but allowing only the water and ions to pass through the semi-permeable material of the present invention.

In general, a semi-permeable film is characterized by MWCO (i.e., Molecular Weight of Cut-Off), and gas permeation is one of generally possible qualities in common films. Here, MWCO is a unit indicating the molecular size that can be filtered out by a ultrafiltration membrane.

Patel describes a semi-permeable film in a very broad sense such that Patel discloses a semi-permeable film that could control the gas permeability.

However, the film according to the present invention has small pore sizes of about MWCO of 100-200, and, in food, it prevents permeation of nutrient and/or color substances of the food but allows passing of water and ions—thereby, the film according to the present invention has the barrier or sieve characteristics.

At least in this regard, Patel does not teach every element of the presently claimed invention.

Regarding ph-sensitive substance high molecule

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Ph sensitive substance high molecules refer to materials that can go through a phase transition in a certain ph condition.

In the present invention, ph-sensitive substance high molecule materials are synthesized by combining sulfonamide and monomers according to mole ratio, as the degeneration point is different for different foods such that the purpose is to combine different materials having different sensibility. The ph-sensitive substance high molecule materials relates to a film formed by high molecular polymers that is applied to the front side of the food freshness indicator as coating.

In contradistinction, the high molecule materials disclosed in Patel are nano particles combined for medical purposes that is to accomplish a carrier purposes from a drug delivery system. Thus, Patel discloses material that is quite different from the material of the present invention such that it is not possible for the Patel's material to accomplish the results accomplished by the present invention.

Further, the polymer of the present invention has amine attached to it such that it is chemically combined to the surface of the indicator. Even though basic substance of the chemical substances are considered to be similar, they exhibit different characteristics depending on the location and amount of amine that are attached to the chemical substance. Thus, they cannot be considered to be similar.

As to the dependent claims 2-3, the applicant respectfully submits that these claims are allowable at least since they depend from claim 1, which is now considered to be in condition for allowance for the reasons stated above.

For the reasons set forth above, the applicant respectfully submits that claims 1-4 pending in this application are in condition for allowance over the cited references. Accordingly, the applicant respectfully requests reconsideration and withdrawal of the outstanding rejections and earnestly solicits an indication of allowable subject matter.

This amendment is considered to be responsive to all points raised in the office action. Should the examiner have any remaining questions or concerns, the examiner

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is encouraged to contact the undersigned attorney by telephone to expeditiously resolve such concerns.

Respectfully submitted,



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